

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-08-23  
**Investment Auto Submission Date:** 2012-02-27  
**Date of Last Investment Detail Update:** 2012-02-27  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX709: Runway Status Lights (RWSL)

**2. Unique Investment Identifier (Ull):** 021-113910548

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

Runway Status Lights (RWSL) is a fully automated system that integrates airport lighting equipment with terminal and surveillance systems to provide a visual signal to pilots and vehicle operators when it is unsafe to enter, cross, or begin takeoff roll on a runway. Airport surveillance sensor inputs are processed through light control logic that commands in-pavement lights to illuminate red when there is traffic on or approaching the runway. Runway entrance lights (REL) signal to aircraft crossing or entering a runway from an intersecting taxiway when it is unsafe to do so. Takeoff hold lights (THL) let pilots in position for takeoff know if another aircraft is crossing or entering the runway. RWSL has dependencies with the following investments: Airport Surface Detection Equipment Model X (ASDE-X), Automatic Dependent Surveillance-Broadcast (ADS-B) and FAA Telecommunications Infrastructure (FTI). RWSL requires the ASDE-X surveillance data which it receives through an interface with the ASDE-X Data Distribution Unit (DDU). San Francisco International (SFO) is the only designated RWSL airport without an ASDE-X system. Therefore, the installation of RSWL at SFO is dependent on the installation of the ADSB Airport Surface Surveillance Capability (ASSC), a multilateration only capability being deployed to select airports with no ASDE-X in support of NextGen.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The RWSL Program directly supports the DOT Strategic Plan and FAA Destination 2025 Goal Areas of "Safety" and "Next Level of Safety" respectively. The RWSL System is designed to avoid runway collisions and incursions by increasing the situational awareness of aircraft pilots and ground vehicle operators. RWSL is the first system to provide time critical safety information directly to pilots and vehicle drivers. RWSL provide an added layer of safety for the runway environment without impacting normal airport operations or capacity. The effects of RWSL will contribute to the following outcomes: (a) Strive to eliminate fatalities on commercial service aircraft in the US; (b) Reduce Aviation risk through all phases of flight (gate to gate); (c) Implement 40% of mitigating strategies of the top five airport risk areas; and (d) Maintain the rate of serious runway incursions at or below 20 per 1000 events. Lack of full funding will delay or prevent the implementation of RWSL capabilities at some airports thus reducing their ability to increase safety by lowering the risk of runway incursions.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

The Program has completed the following: (a) 16 Final Airport Designs and 18 Site Surveys; (b) Construction and Installation complete at 2 Airports and in progress on 11 others; (c) Key Site Site Acceptance Testing (SAT) - Mar-2011; (d) Operational Test & Evaluation (OT&E) - Apr-2011; (e) Key Site Initial Operating Capability (IOC) - Jul-2011.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Program accomplishments in FY2012 (CY) include reaching Joint Acceptance Inspection (JAI) for nine completed sites (Phoenix (PHX), Houston (IAH), Minneapolis (MSP), Seattle (SEA), Las Vegas (LAS), Dulles (IAD), Fort Lauderdale (FLL), Charlotte (CLT), and Chicago (ORD). Activities in CY include site construction and system implementation at four sites (Baltimore (BWI), Detroit (DTW), Newark (EWR), and John F. Kennedy (JFK). Program accomplishments in FY2013 (BY) include conclusion of Site Acceptance Testing (SAT) at three sites (Detroit (DTW), LaGuardia (LGA), and John F. Kennedy (JFK). Program activities in FY2013 (BY) include site construction and system implementation at three sites (Atlanta (ATL), Denver (DEN), and Philadelphia (PHL).

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2010-01-20

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$5.7	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$152.1	\$54.5	\$29.0	\$35.0
DME (Including Planning) Govt. FTEs:	\$4.3	\$3.9	\$3.8	\$3.8
Sub-Total DME (Including Govt. FTE):	\$162.1	\$58.4	\$32.8	\$38.8
O & M Costs:	\$0.0	\$0.1	\$0.4	\$0.7
O & M Govt. FTEs:	\$0.3	\$0.3	\$0.3	\$0.3
Sub-Total O & M Costs (Including Govt. FTE):	\$0.3	\$0.4	\$0.7	\$1.0
Total Cost (Including Govt. FTE):	\$162.4	\$58.8	\$33.5	\$39.8
Total Govt. FTE costs:	\$4.6	\$4.2	\$4.1	\$4.1
# of FTE rep by costs:	43	14	14	15
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

For the 2013 Passback, funding was added in FY15 (\$2.0M) and FY16 (\$23.0M) for a total increase of \$25.0M. This additional funding was provided to address cost growth caused by costly construction methods, requests for additional light arrays, and new airport requirements. RWSL is implementing cost containment strategies to contain cost growth to \$25M. They plan to return to the JRC to rebaseline in early 2013.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									
Awarded	6920	DTFAWA-09-D-00010									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:  
N/A.

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-08-23

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
MCO	Orlando RWSL	Site implementation of RWSL at Orlando Airport.			
PHX	Phoenix RWSL	Site implementation of RWSL at Phoenix Airport.			
IAH	Houston RWSL	Site implementation of RWSL at Houston Airport.			
MSP	Minneapolis RWSL	Site implementation of RWSL at Minneapolis Airport.			
LAS	Las Vegas RWSL	Site implementation of RWSL at Las Vegas Airport.			
IAD	Dulles RWSL	Site implementation of RWSL at Dulles Airport.			
FLL	Ft. Lauderdale RWSL	Site implementation of RWSL at Ft. Lauderdale Airport.			
SEA	Seattle RWSL	Site implementation of RWSL at Seattle Airport.			
CLT	Charlotte RWSL	Site implementation of RWSL at Charlotte Airport.			
ORD	Chicago RWSL	Site implementation of RWSL at Chicago Airport.			
LGA	LaGuardia RWSL	Site implementation of RWSL at			

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
LaGuardia Airport.					
JFK	JFK RWSL	Site implementation of RWSL at JFK Airport.			
DEN	Denver RWSL	Site implementation of RWSL at Denver Airport.			
DTW	Detroit RWSL	Site implementation of RWSL at Detroit Airport.			
PHL	Philadelphia RWSL	Site implementation of RWSL at Philadelphia Airport.			
EWR	Newark RWSL	Site implementation of RWSL at Newark Airport.			
BOS	Boston RWSL	Site implementation of RWSL at Boston Airport.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
MCO	Orlando RWSL							
PHX	Phoenix RWSL							
IAH	Houston RWSL							
MSP	Minneapolis RWSL							
LAS	Las Vegas RWSL							
IAD	Dulles RWSL							
FLL	Ft. Lauderdale RWSL							
SEA	Seattle RWSL							
CLT	Charlotte RWSL							
ORD	Chicago RWSL							
LGA	LaGuardia RWSL							
JFK	JFK RWSL							

## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
DEN	Denver RWSL							
DTW	Detroit RWSL							
PHL	Philadelphia RWSL							
EWR	Newark RWSL							
BOS	Boston RWSL							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
MCO	Initial Operating Capability (IOC) (APB Milestone)	Initial Operating Capability	2011-05-24	2011-07-30	2011-07-30	91	-67	-73.63%
MCO	Independent Operational Assessment (IOA) (APB Milestone)	Independent Operational Assessment	2011-06-30	2012-07-03	2012-06-29	98	-365	-372.45%
DEN	Design Phase III - Final Design	Final Development and approval of site specific engineering report	2011-07-21	2011-07-21	2011-07-21	145	0	0.00%
JFK	Design Phase II - Preliminary Design	Development and approval of site specific engineering report	2011-08-16	2011-08-16	2011-08-16	644	0	0.00%
MCO	In Service Decision (ISD) (APB Milestone)	In Service Decision	2011-08-30	2012-10-31		27	-428	-1,585.19%
MCO	First Site Operational Readiness Decision (ORD)	Operational Readiness Decision	2011-08-31	2013-02-08		98	-527	-537.76%
EWR	Design Phase II - Preliminary Design	Development and approval of site specific engineering report	2011-10-03	2012-08-24		222	-333	-150.00%



Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
DTW	Design Phase III - Final Design	Final Development and approval of site specific engineering report	2011-10-06	2011-10-06	2011-11-17	470	-42	-8.94%
JFK	Design Phase III - Final Design	Final Development and approval of site specific engineering report	2011-11-25	2012-08-07		71	-280	-394.37%
PHX	Phoenix System Acceptance Testing (Site Acceptance Testing (SAT))	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2011-12-06	2012-08-03		235	-269	-114.47%
IAH	Houston Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2011-12-06	2012-06-29	2012-06-15	214	-192	-89.72%
SEA	Seattle Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2011-12-20	2012-10-23		95	-308	-324.21%
IAD	Dulles Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2012-01-16	2012-04-13	2012-03-16	105	-60	-57.14%
MSP	Minneapolis Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2012-02-06	2012-11-28		103	-296	-287.38%
ORD	Chicago Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2012-02-14	2012-11-14		97	-274	-282.47%
FLL	Ft. Lauderdale Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2012-02-27	2012-09-14		98	-200	-204.08%
CLT	Charlotte Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance	2012-03-02	2012-09-07		93	-189	-203.23%

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
Inspection (CAI)								
LAS	Las Vegas Site Acceptance Testing (SAT)	Site Acceptance Test / Contractor Acceptance Inspection (CAI)	2012-03-14	2012-10-05		93	-205	-220.43%

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Number of Category A&B Runway Incursions at the 23 RWSL airports since FY2012	Sum of Runway Incursions	Mission and Business Results - Services for Citizens	Under target	0.000000	0.000000	0.000000	0.000000	Semi-Annual
Number of Runway Incursions Caused by Pilot Deviations at the 23 RWSL airports since FY2012	Sum of Runway Incursions by pilot	Process and Activities - Productivity	Under target	0.000000	0.000000	0.000000	0.000000	Semi-Annual
Detections (a "detection" is a warnings of a runway being occupied) by RWSL	Number of missed detections per year	Technology - Effectiveness	Over target	0.000000	0.000000	0.000000	0.990000	Monthly
Detections (a "detection" is a warnings of a runway being occupied) by RWSL	Number of missed detections per year	Technology - Quality Assurance	Over target	0.000000	0.000000	0.000000	0.990000	Semi-Annual
System availability results from MMS.	Operational periods divided by observed failures	Customer Results - Service Accessibility	Over target	0.000000	0.000000	0.000000	0.999000	Monthly
System availability results from MMS.	Operational periods divided by observed failures	Customer Results - Service Accessibility	Over target	0.000000	0.000000	0.000000	0.999000	Monthly
Number of Category A&B Runway Incursions at the 23 RWSL airports since FY2012	Sum of Runway Incursions	Mission and Business Results - Services for Citizens	Under target	0.000000	0.000000	0.000000	0.000000	Semi-Annual
Number of Runway Incursions Caused by Pilot Deviations at the 23 RWSL airports since FY2012	Sum of Runway Incursions by pilot	Process and Activities - Cycle Time and Timeliness	Under target	0.000000	0.000000	0.000000	0.000000	Semi-Annual

